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OUR FIRST 100 YEARS, HIGHLIGHTS OF CENTENNIAL TEACHERS
INSTITUTE (MARYLAND SCHOOL FOR THE DEAF, FREDERICK, MARYLAND,
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TWO SPEECHES PRESENTED AT THE CENTENNIAL TEACHERS
INSTITUTE OF THE MARYLAND SCHOOL FOR THE DEAF IN MARCH 1968
ARE CONTAINED IN THIS BOOKLET ALONG WITH A SHORT HISTORY OF
THE SCHOOL AND A LIST OF AGENCIES AND ORGANIZATIONS
REPRESENTED. HELMER R. MYKLEBUST, IN "LEARNING AND
EDUCATIONAL FAILURE IN DEAF CHILDREN--PSYCHONEUROLOGICAL
CONSIDERATIONS," STRESSES THAT THERE IS A NEUROLOGY AS WELL
AS A PSYCHOLOGY OF LEARNING AND THAT THE DEAF CHILD IN EARLY
LIFE MUST RELY ESSENTIALLY ON NONVERBAL LEARNING. MYKLEBUST
ALSO DISCUSSES THE FUNCTIONS OF THE DIFFERENT HEMISPHERES OF
THE BRAIN AND THE POSSIBILITY THAT THE BRAIN OF A DEAF PERSON
HAS DIFFERENT HEMISPHERE DOMINANCE FROM THAT OF A HEARING
PERSON. IMPLICATIONS FOR THE EDUCATION OF THE DEAF ARE
CONSIDERED. IN "A DIAGNOSIS OF THE EDUCATION OF THE DEAF,"
BEN E. HOFFMEYER CONSIDERS THE PARENTAL, PSYCHOLOGICAL,
SOCIAL, AND ECONOMIC PRESSURES WHICH HAVE DICTATED THE
APPROACH USED IN EDUCATING THE DEAF AND EMPHASIZES THE
IMPORTANCE OF ACCOMODATING EDUCATIONAL PROCEDURES TO THE
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Highlights From . . .

Centennial Teachers Institute

"Our First 100 Years"

Maryland School for the Deaf

Frederick, Maryland

March 7, 8, 1968

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HIGHLIGHTS OF
CENTENNIAL TEACHERS INSTITUTE
MARYLAND SCHOOL FOR THE DEAF
FREDERICK, MARYLAND
MARCH 7,8, 1968

LIST OF AGENCIES AND ORGANIZATIONS REPRESENTED

INTRODUCTORY REMARKS

PREFACE

LEARNING AND EDUCATIONAL FAILURE IN DEAF CHILDREN: PSYCHONEUROLOGICAL
CONSIDERATIONS – Dr Helmer R. Myklebust, Director, Institute for Language Disorders and
Professor of Language Pathology and Psychology, Northwestern University, Evanston, Illinois

DIAGNOSIS OF THE EDUCATION OF THE DEAF – Mr Ben E. Hoffmeyer, Vice President,
Conference of Executives of American Schools for the Deaf Superintendent of the North
Carolina School for the Deaf, Morganton North Carolina

ORGANIZATIONS REPRESENTED AT
THE CENTENNIAL TEACHERS INSTITUTE

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Vocational Rehabilitation, Local, State and Federal

INTRODUCTORY REMARKS

The Maryland School for the Deaf is presently celebrating its hundredth Birthday. Efforts to provide for the educational needs of deaf children, within the State, however, are much older than one hundred years. The first Maryland deaf child to attend a school for the deaf, was sent as a tuition pupil to the American School in Hartford, Connecticut in 1817, the year the American School opened. In the years following, various arrangements were put into effect to provide for the hearing impaired youth of Maryland. From 1828 until 1865, deaf children from Maryland, attended the Pennsylvania School in Philadelphia. The Columbia Institution in Washington, D.C., which is now Kendall School, served the State of Maryland from 1865 to the opening of this school in September 1868.

Although there were doubts in the minds of some as to the need for a school for the deaf in Maryland, the Maryland School for the Deaf was established by an Act of the General Assembly in January 1867. State land and buildings in Frederick were given to the institution, together with an endowment of \$5,000. An appropriation of \$25,000 was made for furnishings and building purposes.

The property donated to the school had belonged to Maryland from Colonial Times. Three old buildings, including two stone barracks, believed to date from the 1750's, were located on this property.

It was in one of these restored stone barracks, that the Maryland School first opened its doors to greet 34 pupils in September 1868. During that year, 25 more students were admitted, increasing the enrollment to 59 for the first year. As the enrollment increased, the school felt the need for larger and better planned buildings, consequently, in January 1870, an appropriation was made by the State Legislature for this purpose. The center section of the main building and the South West section were occupied in January 1873. An additional \$125,000 made completion of the main building possible in 1875.

Since the school first opened its doors, the campus has seen many changes. Enrollment has risen from the initial 59 to the present 300 with many students knocking at our doors and awaiting the completion of facilities which will enable them to enter the school. Although one of the old stone barracks, in which the school began, is still standing, many other buildings have been erected, have served the school well and when they became tired and outmoded, have been replaced so you find us today . . . still in the process of rebuilding and expanding to meet the needs of the deaf children of Maryland.

As we bring to a close our first 100 years, perhaps it would be fitting to restate our very basic commitment. The Maryland School for the Deaf is dedicated to the task of providing quality educational services for the hearing impaired children of the State. We believe that the literate deaf person, as the literate hearing person, must be able to read and write well enough to gain information for himself from the printed page, and must be able to express himself clearly in written language. This is a primary goal in the education of the deaf to provide students with the tools for independent learning for the rest of their lives. In our highly competitive technological society, this is their means of survival. It is to this task that we rededicate ourselves as we begin the second hundred years.

PREFACE

At some point during the course of activities of the two day Centennial Teachers Institute, Dr. Powrie V. Doctor, Editor of the American Annals of the Deaf, was heard to remark ... "too bad it only happens every 100 years." This statement, in my opinion, aptly sums up the significance of the Institute, particularly as it relates to the quality of the two principal speakers whose remarks follow. Only once in a century could we expect to bring together on the same platform, at the same time, two persons whose professional reputations are more widely respected than those of Dr. Helmer R. Myklebust and Mr. Ben E. Hoffmeyer.

Dr. Myklebust's remarks approach the very heart of our professional efforts, through an exploration of the nature of the learning processes and the influence of deafness upon these processes. Mr. Hoffmeyer's comments, likewise, hammer at the very core of our professional responsibility through a courageous analysis of educational programs for the Deaf. These two men have been, and continue to be an inspiration to me, not only because of their competence, but as well, because of their willingness to face each problem, fulfil each responsibility with a high degree of intellectual honesty.

David M. Denton

LEARNING AND EDUCATIONAL FAILURE IN DEAF CHILDREN PSYCHONEUROLOGICAL CONSIDERATIONS

*Helmer R. Myklebust
Northwestern University*

Thank you, Mr. Denton. Distinguished guests, ladies and gentlemen. Because this is such an auspicious occasion, I found it difficult to choose a topic. On occasions as this, there is so much that we could discuss and review. For example, we might consider the history of progress in deaf education – the growth of schools, medical centers, and other types of programs. Or, we might devote our attention to the pioneers, to whom we owe so much, including the early pioneers and leaders from this school. Mr. Jamison has mentioned Dr. Ejlertsen. I knew him well, not only when I was a teacher but when I was a student. You who are deaf especially will remember his devoted efforts in connection with the making of the safety record of the deaf automobile driver available to state legislatures so that unfortunate laws would not be passed prohibiting deaf people from driving.

The topic I have chosen, I'm afraid, is not mainly concerned with the interests of those of you who are parents because today I am directing my discussion to the professional educator in the field of deaf education. And to you who are deaf – from whom we have learned so much – I apologize for the way in which I must talk about you. (You are free to talk about me as much as you like.) But I ask you to not take my remarks as a criticism of your achievements. I know that your accomplishments are most remarkable. However, in my way I wish simply to suggest that despite your successes, there are problems that need analysis, study, and deeper understanding. It is to these questions that I am speaking, so that the deaf children of the future might have an even better opportunity for development, growth, and achievement.

The topic, Learning and Educational Failure in Deaf Children, it seems to me, is of great relevance to the world of deaf education. By this, I mean there is a need to evaluate what we mean by learning in deaf children, as well as a need to appraise the success of our efforts. I appreciate the challenge of this opportunity, especially in association with the Centennial Celebration of the Maryland State School for the Deaf.

By way of introduction, may I review statements that I made early in this decade. By nature man has input channels and monitoring systems which are highly efficient for maintaining homeostatic equilibrium. But when a sensory deprivation occurs the means whereby the individual maintains this balance must be altered. He must modify the ways in which he attains knowledge of reality. Although the human being is highly adaptable and can make compensatory adjustments, a sensory deprivation limits the world of experience. It deprives the individual of some of the material resources from which (ordinarily) the mind develops. Because total experience is reduced, because reality is perceived less effectively, there is an imposition on the balance and equilibrium of all psychological processes, when one type of sensory information is lacking it alters the integration and function of all of the others. Experience is constituted differently. The world of perception, conception, imagery, and thought has an altered foundation, a new configuration. Such alteration occurs naturally and unknowingly because, unless the deaf person organizes and attunes differently, his very survival may be jeopardized.

To a degree these statements summarize my understanding of the effect of early life deafness on the person. This understanding is based on my experiences as a teacher of normal deaf children and of mentally retarded deaf children, on my experience as a psychologist in a school for the deaf, and on my more recent experience as a researcher. It is my impression that much has been learned about the effects of deafness on learning, albeit at times the claims and counterclaims appear disturbing and some of us cannot avoid feel –

ings of frustration, or even despair. I say, despair not - your role as teachers and specialists in the field of deaf education is of more consequence and significance than ever before. As we learn more about learning in the deaf, we learn more about learning in every human being. As we go on with our discussion today I hope to convey the impact of how the problems encountered in teaching deaf children are relevant to our understanding of auditory versus visual processes, and how critical these are to understanding the manner in which every child learns to read, and there are various other implications of the problems which confront us in deaf education.

A PSYCHONEUROLOGICAL CONCEPT OF LEARNING IN DEAF CHILDREN

Today we are celebrating a century of deaf education in Maryland, in fact at this school, the Maryland State School for the Deaf. Now it might be said that during this past century the primary issue has been the method, or methods, whereby the deaf child should be taught. Only now and then have what I consider to be more basic questions been raised - such as, What is the effect of deafness on learning? By what processes does the deaf child learn? Is there an effect on the nervous system when the auditory areas of the brain are not directly activated? These questions pertain to what we designate as a psychoneurological concept of learning in children who have profound early life deafness. Let us explore this concept.

When evaluating learning processes, a fundamental consideration is the marked degree of specialization in the human brain, we must not overlook the fact that it is the brain that learns. (This is a fact that some educators and psychologists conveniently ignore.) The degree of specialization in the brain is considerably greater in man than in any other form of life. As a result we have the phenomenon referred to as cerebral dominance, one of the hemispheres of the brain serves certain functions more than the other hemisphere does. Hence, in most individuals, perhaps including many who are left-handed, it is the left hemisphere that carries primary responsibility for acquisition of language in all forms - spoken, read, and written. Moreover, as more knowledge is gained relative to how the brain codes, classifies, and integrates, it appears that it is the right hemisphere that carries basic responsibility for the nonverbal facets of behavior. How important this part of learning is, especially for the deaf.

In addition to a "division of labor" in relation to the hemispheres, there are well defined auditory, visual, tactile, and other systems and areas in the brain. When studying the psychoneurology of learning in the deaf, one cannot avoid being concerned with the question of whether the hemisphere responsibilities (and the brain area responsibilities) remain the same under this radically different set of circumstances. In other words, when the child is not capable of auditory language because he does not hear, is the primary "language center" still on the left hemisphere? There are other questions that intrigue us. For example, when a deaf child speaks is he using the well-known Broca's area located in the third left frontal convolution? We know from histological studies that this area is closely connected with auditory pathways and to the motor area for speaking. We must hypothesize, however, that if this area serves the same purpose for the deaf child, the association must be with areas for visual learning, not with auditory.

Likewise, is reading in the deaf child predominantly a left hemisphere function, as it is in the hearing child? We are more and more cognizant that the normally hearing child learns to read by associating the visual with the auditory word. Inasmuch as this is not possible for the deaf child, we must assume that in his case the neurology as well as the psychology of learning to read is different.

Before considering these possibilities in somewhat greater detail, we raise another question. In terms of hemispheric dominance and neurological systems, how do our deaf children learn speech reading? This is a critical question, one that we have found perplexing for a number of years. In discussing this question with a famed neurologist he expressed the opinion that it should be served by the brain area that typically serve reading. Now,

several years later, and after having seen many children with aphasia for speechreading, but who learned to read with substantial success, we question this presumption. In fact, the processes involved for acquisition of ability to read the lips, in comparison with those involved in learning to read the printed page, are highly dissimilar. Perhaps, then, we should expect that the neurological systems involved also are dissimilar. We shall return to this question of the neurology of speechreading.

Yet another question comes to mind. We are aware that many deaf persons use the sign language as their native tongue. As meant here, they acquire and use this ideographic system instead of the spoken word which is the basic language of the hearing child. The spoken word is a verbal system and the sign language is a picture language, that is, one is verbal and the other is nonverbal. Perhaps no area of investigation in psychoneurology offers more promise for gaining knowledge than the study of these differences. It is clear that use of the spoken word by the hearing is mainly a function of the left hemisphere. But the sign language is a nonverbal system; hence, by comparison it should be mainly a right hemisphere function. Unfortunately, objective evidence still is essentially lacking.

There are two interesting reports in the neurological literature -- one of which appeared in 1896 and the other in the early 1930's. The first describes a man with early life deafness who had a stroke at 50 years of age. After his illness he could use the manual alphabet with his left hand but not with his right. Before his illness he could spell with both hands but after his illness he had an aphasia for this symbolic system on the left half of the brain. This would explain his inability to spell using the right hand. (As you know, the left half of the brain controls the right side and the right half controls the left side.)

The second report is given in somewhat greater detail. This man had normal hearing until seven years of age, at which time he began to lose his hearing, with a total loss occurring by age 14. He entered a school for the deaf where he learned both speechreading and the sign language. Between 40 to 50 years of age, he had a stroke, after which he could no longer read the lips or use finger spelling. However, use of the sign language remained essentially intact. The lesion was on the left hemisphere (most strokes are on this half of the brain) which in some ways appears to be used more. We might infer that in this man with acquired deafness, speechreading and finger spelling were on the left but that sign language was on the right. Certainly, from this we should conclude, as we have for a number of years, that a brain dysfunction can cause an aphasia for speechreading. (Except in a very few instances, little attention has been given to this condition by educators of the deaf.)

In this connection we are greatly interested in the work on dyslexia being done in Japan. (Dyslexia is a condition which means that the individual cannot learn to read because of a dysfunction in the brain.) In preliminary studies there, neurologists suggest that a dyslexia for Japanese, which is an ideographic system of language, is related principally to right hemisphere damage -- the opposite of what occurs for dyslexia in a phonetic language, such as English. This supports the presumption that use of the sign language requires integrity of the right hemisphere. (Both the written language of the Japanese and the sign language are ideography.)

It may be of some importance to consider these questions further and to formulate a psychoneurological model of learning processes in deaf children. It is acknowledged that such a model would be largely speculative at this time. In the hearing child the process of acquiring a dominant hemisphere on the left side begins early in life, through constant bombardment of the spoken word he gradually achieves this highly characteristic specialization. Simultaneously, it is natural for him to begin establishing a nonverbal perceptual-conceptual organization mainly on the right hemisphere.

By comparison, I must stress that the deaf child in early life, irrespective of early instruction, must rely essentially on nonverbal learning. He must understand his world and he must do so largely through what he sees and observes happening around him, not from what he hears -- not from permissively acquiring auditory language. In fact, it seems that the deaf child must continue to depend on nonverbal learning and experience for several years,

regardless of what success he might be having in acquiring verbal language. In fact, from both clinical experience and research it appears that to make a successful adjustment, the deaf person throughout life must use nonverbal information to a much greater extent than does the average hearing person. Thereby, his dependency on the right half of the brain would be greater, and there would be less dependence on the left hemisphere.

It should be made clear that both hemispheres are involved in learning, the information from one being transmitted to the other, principally through the corpus callosum. But as suggested above, each hemisphere has its specialized role. Also, because the deaf child has difficulty acquiring language, there might be less interaction between the hemispheres. The right, so important to the deaf child's comprehension of his world, becomes more dominant than is typical for the hearing child. Now, is there evidence to support these postulations?

Though hemisphere dominance for use of language and of the hands are not identical, we have been collecting research—statistical evidence on the possibility that a different use of hemispheres in the deaf child might be observable through his motor maturation and handedness. We hypothesized that his left hemisphere was being stimulated less than usual, while in certain ways his right was being activated more than average. One of our graduate students included this as a part of his rationale in an intensive evaluation of the motor abilities of deaf boys. (This work was done through the cooperation of 17 schools for the deaf here on the eastern seaboard. We are indebted to all of them for this assistance.)

In terms of the psychoneurological concept of learning, it was of great interest to us that he found less lateral dominance in deaf children as compared with the hearing. The deaf boy was more ambidextrous — he used both hands and showed less hand preference in performance of motor coordination tasks. He would state that he was right-handed but when asked to perform, he often used his left hand. In all instances, the deaf boy was compared with a hearing boy of the same age, IQ, etc. Although this finding was consistent irrespective of the cause of deafness, it occurred most often in those in whom the deafness was endogenous; not due to disease. Hence, we cannot attribute these results to brain damage.

These findings were revealing in another way because in certain respects deafness also was an imposition on motor development maturation. We do not maintain that this evidence demonstrates the greater than average dependency of the deaf child on the right hemisphere, but that it supports this hypothesis and, as a result, the hypothesis warrants further investigation.

In this discussion I am stressing that there is a neurology as well as a psychology of learning. Also, that lack of audition requires an alteration in the neurology by which the child learns. Furthermore, that the ways in which the deaf child's neurological processes have been modified are related and, to some extent, determine, the psychology by which he learns most successfully.

These relationships between the neurological and psychological facets of learning in the deaf are precisely our deepest concern in this discussion — as they are the deepest concern in our research at this time. We are exploring these relationships further by obtaining additional evidence on both neurological and psychological functioning. Several studies have been completed in the area of psychological functioning and these have been both stimulating and revealing. For example, one of our graduate students made a factorial analysis of the intellect of deaf children. He clearly demonstrated that intelligence or, more broadly, the mind of deaf children comprises a series of interrelations that differ from hearing children. We might say that when the deaf child codes, classifies, integrates, and remembers, he uses relationships and associations that distinguish him from the hearing. The organization of his intellect is different. This should not surprise us when we know that the information at his disposal, and on which his intellect is based, is substantially different from that of the child normal hearing. In my opinion, studies of this type are clarifying the psychological efforts of deafness, in particular the effects of deafness on intellectual development and organization.

What about evidence from the study of neurological functions? Though our investigations of this aspect have only just begun, I wish to report some preliminary impressions. We have in progress a study of deaf children with good intelligence who are not achieving academically. Each child is studied ophthalmologically (condition of the eye), neurologically (integrity of the nervous system), electroencephalographically (brain waves), educationally (reading, writing, speaking), and psychologically (evaluation of mental ability). At this time I will comment only on the brain wave patterns. Our scientist in this area states that there is little evidence to suggest that these children who are not achieving as expected have a true or common type of damage to the brain (as supposed by many). The records are unusually negative in this regard. But these children seem not to show the common expected hemisphere differences – typically, there are slight differences in electrical output from one to the other hemisphere. In other words, our results to date indicate that the two halves of the brain are more alike as compared with those of hearing children. These findings are in the same direction as those from our motor and psychological studies.

Even though of a different nature, I feel that I must mention another study, also done by one of our students, because the results seem especially interesting. He studied the mental growth of deaf children in relation to academic achievement. In so doing he used a motor memory test which required the child to trace a maze with his finger tips while blindfolded. Not only were deaf children above average in this ability but this ability was negatively related to educational achievement; the correlation was highly significant. In other words, the better the child's ability in tactile-motor function, the more inferior he was in academic learning. This may be one reason for academic failure. Overdependence on one type of learning precludes using another type well. It appears that as the child becomes more dependent on tactile-motor perception, the less he is able to learn symbolically.

It is not known whether these results are related to greater dependence on the right hemisphere. However, the mazes that were traced are nonverbal and it may be that competence in this task assumes more involvement of the right half of the brain. If so, then we might presuppose that the more tactile-motor learning takes over on the right, the less verbal learning is achieved.

IMPLICATIONS FOR EDUCATION

All experienced educators of the deaf have been aware that the problem of learning in deaf children is a very complex one. Unfortunately, during the entire past century this problem has been oversimplified by many persons. One panacea after another has been suggested. I would caution you that despite progress in understanding the implications of deafness for learning and adjustment, there is no panacea on the horizon. There is optimism and there is challenge! But, further progress depends upon careful "middle of the road" planning. We cannot afford to commit ourselves to simple answers; it makes no difference who puts them forth. One of the most serious disservices to the deaf child is to treat him as though he must learn according to a given prescription, and not to view him as an individual. However, despite this, in educational planning there are assumptions that can be made for groups of children.

More specially, I shall now try to outline some of the implications for the educator:

First, there is reason to assume that the neurology of learning in deaf children is different from that for the hearing. Therefore, we must assume that the psychology by which the child learns also varies. The learning model (the frame of reference) for the hearing cannot serve directly as our model for the deaf. The most obvious required modification is recognition that for the hearing it is audition with vision and taction that constitutes the main basis of experience, while for the deaf it is mainly vision and taction. Hence, it is these intra- and interneurosensory process that must be considered and utilized to the

greatest extent possible.

Secondly, in terms of a psychoneurological concept, the hearing child approaches school learning with his mind organized largely around a verbal system, whereas the deaf child approaches this situation with his mind organized around a nonverbal system; the hearing child depends upon a verbal world and frame of reference while the deaf child depends upon a non-verbal world and frame of reference. There are basic considerations accordingly which entail concepts from neurology, and even from biology.

Third, there is reason for us not to be method bound. To be bound by a single, stratified approach at this time seems naive for a number of reasons. Instead, the need is to consider systems and processes. From the point of view of systems, we must keep in mind both intra- and interneurosensory functioning. For example, visual versus tactile learning — the ways in which each of these avenues can be utilized separately, as well as the ways in which we might foster interneurosensory perception and concept formation, so that greater enhancement occurs across these modalities. In addition, psychoneurological considerations must be viewed as having both a determining and a fluid influence on the child's learning. This is emphasized by the criterion of verbal versus nonverbal systems and processes. The child's learning must comprise both, not one to the extent that the other is ignored. To stress this factor further, we must think in other terms than this or that method, and utilize the systems and processes that are most logical and effective according to the basic implications of deafness for learning.

Last, only when we combine the psychology and neurology of learning as found in deaf children can we build the foundation for a more successful approach to their education. Knowledge is limited but there are fundamental principles on which we can base our efforts.

THE FUTURE

What are the implications for the future? What about the next century? I am confident that already we have entered a new era, characterized by the fact that a new type of information is available in the study of man. No longer do we secure one type of information followed by another. In other words, no longer is it necessary to first obtain psychological data, then neurological, then educational, followed by others. What is new in the study of people is that various types of information can be acquired at the same given instant in time. To illustrate, we now obtain data on mental imagery, and thought processes while the child is in the act of learning. We are applying this biomedical engineering and psychoneurological approach to the study of the influences of sign language versus verbal language on thinking while the child is in the act of mentally solving problems.

To illustrate further in the century ahead we will be using telemetering. Each child will be equipped with a small transmitter in a helmet-type unit that will be worn on his head while he is engaging in regular activities in the classroom. Already we have blueprints for such a classroom, recognizing that the teacher will have instrumentation which will make it possible for her to study the electro-cortical output of the brain while the child is engaged in classroom learning.

I have spared you from viewing slides today, but you will be interested to know that we have a slide showing a comparison of the thought processes of a deaf adolescent girl with those of a hearing girl. I can assure you that these techniques reveal differences and that this approach will be of inestimable value for the study of the psychoneurological influences of deafness on learning and adjustment.

I, for one, believe that with the educator and the scientist working together, the future of the deaf child will continue to be brighter and brighter. Indeed, the next century might even be better than the last. Thank you.

Note: Emphasis is the Author's

A DIAGNOSIS OF THE EDUCATION OF THE DEAF

*Ben E. Hoffmeyer, Superintendent
N.C. School for the Deaf*

When a critique is offered in an area so historically fragmented as the field of education of the deaf, the author should be prepared to weather severe rebuttal; I am so prepared. The critique I am about to offer stems from a sincere feeling that there is need to analyze and diagnose the conditions that exist in the education of the deaf. A mirror reflects an image that often is not flattering, but realistic evaluation of what is seen often leads to improvement. It is a fact of life that prejudice blinds one to realistic evaluation of oneself, or to a condition. It is going to be difficult to divorce myself from prejudices in order for me to give an unbiased diagnosis of education of the deaf.

There seem to be several deterrents that prevent a completely objective view and it is hoped that identifying these deterrents will assist in transcending them. These blurring conditions are parental, psychological, social and economic pressures that have dictated the approach used in educating the deaf child for centuries.

It seems logical that procedures in educating a deaf child would be dictated by the needs of the individual child, recognizing that individual differences are present in deaf children. The needs of the individual deaf have been secondary throughout much of the history of the education of the deaf. Secondary to the desire of parents, which in itself, is often a desire to blunt the embarrassment of them of having a deaf child, or cover up a guilt complex, or a half dozen reasons other than a sincere, realistic dedication to making their child a normal deaf citizen, and not a struggling second rate, pale imitation of a normal person.

Educators of the deaf have too often designed educational programs to fit the desires of parents, rather than design programs to meet the needs of deaf children. Parent participation is extremely desirable, but their participation should be directed by an educator of the deaf, instead of of the educator being a puppet manipulated by the parents. Parents of normal children have more license to dictate educational programs in public schools, than do parents of deaf children. This is based on the fact that the parents of normal children have, themselves, lived through educative processes and have some basis for evaluation. Parents have not lived through the educative processes of a deaf student, so have less foundation to evaluate and in many cases dictate, the methods used in teaching deaf children. Yet many schools have designed their programs so they are popular with parents, for the schools exist on tuition and financial support of parents. If their programs were not so designed, their programs would wither economically. So, through economic pressures and parent desires, educational programs are designed by outside pressures, rather than the program being designed to meet the individual differences, and individual needs of the deaf child. Educators of the deaf are too often subservient of outside pressures instead of being vibrant leaders carrying out programs to fit the deaf child.

Public school education has, and is passing through a period of evaluation. Dr. James B. Conant has prescribed for public schools a multi-track curriculum with a strong vocational and technical program. Many schools for the deaf have been doing just that for years, yet have been subjected to criticism for offering a deaf child a choice, dependent on his varied ability. Many schools have refused to offer more than one method; more than one mold, and have been most critical of the schools offering the type of flexible programs that Dr. Conant recommends for the hearing child.

Educational programs for the deaf often are started by persons who are not educators of the deaf.

These are generally Speech Therapists, Speech Pathologists, Audiologists, Special Education teachers, etc. To get local support, either through the local systems, or local charitable agencies, the programs must resort to sensationalism. They make such statements as they plan to use the modern methods by teaching the deaf speech and lipreading. They are in some cases so naive as to really think teaching the deaf to speak is a modern miracle. Little do they know that Ponce De Leon and others taught speech and lipreading to the deaf in the middle of the sixteenth century. Public schools are discarding the narrow curriculum, the one mold concept, and certainly no one subscribes to the "Little Red School House" anymore, except persons who suggest day classes for the deaf scattered through the public school system. In fact consolidation is strongly recommended, so that varied academic and vocational opportunities can be offered. How can the education of the deaf revert, digress, to the very level that has proved to be unsatisfactory for the hearing? The isolated day classes and the small day schools that do not have professionally trained supervising personnel should be attacked in every possible way. A day school with at least five well graded classes and a full-time trained professional supervisor is acceptable, but anything less should be attacked as educationally unsound. I urge the real educators of the deaf to stand up and make themselves heard. The recognized educational leaders in the field, and many are leading oralists, do not endorse the isolated day classes that do not have professional supervision. Yet these inadequate programs are breaking out in many states. The educators of the deaf should not be divided into oralists, and those educators who endorse sound educational programs for the deaf, and those who are willing to sell out the deaf child for much less.

Integrating the deaf child in a public school program as a general practice for the majority of deaf children is another move promoted by the sensationalists; it can only lead to a "lost weekend" in the education of the deaf. It sounds good to those who do not understand the educational and social handicap of deafness. The ones who propose this as a possible program for the majority of deaf children, hold up one or two isolated cases who succeed, and fill the air with propaganda in support of this theory. They use the "Helen Kellers" of the deaf world as examples. They say nothing of the many educational wrecks left on this unrealistic road. Do we have the right to offer many deaf children as human sacrifices, while these sensationalists jam the periodicals with their unrealistic programs for the vast majority of children? Integration for the deaf children in a public school system is for a few, not the majority, and we should fight this as a proposed state plan for educating deaf children. A profoundly deaf child with average intelligence needs five to six hours of concentrated teaching daily by a well trained teacher, in a well graded class. Any honest, and dedicated educator of the deaf will subscribe to this. Yet the print pours out claims and promises for programs that do not meet these specifications. Parents like to hear the unrealistic when it promises so much for their deaf child.

It takes tremendous courage to tell parents that their deaf child can be taught speech, but that it is a long hard process. The parents need to be told that approximately fifty-percent of profoundly deaf children who are deaf from birth, will have understandable speech for untrained listeners, and the other fifty-percent will not be understood, except by those with trained ears, and some not at all. It takes courage to tell them lipreading, too, has tremendous limitations. It takes courage to tell parents that language is much more important than speech and lipreading. Language somehow does not sound nearly as exciting as speech and lipreading, especially when some novice is trying to start a new program and needs to solicit funds from the public. It is sometime said and often implied that State Schools for the Deaf do not teach speech and lipreading. It is time to publicize loud, and clear, that all schools for the deaf teach speech and lipreading, and that no one opposes it, although, we are not always proud of our achievements in speech and wish we could do better.

Generally the state supported residential schools, and in many cases, the church schools, are schools that use the multi-method approach to teaching. Certainly the state schools cannot restrict their enrollment to any extent and have students with a wide variation of abilities, and the students have varied family backgrounds. The situation presents a most difficult educational task. There is some inclination in such settings to let speech and lipreading become eroded by the mis-use of fingerspelling and sign language. It is human to take the easy way, and the deaf are quite human. Certainly all who work with them are also quite human. As a result, we hear, when it is used, a fairly good quality of speech, but the quantity is often far below what should be expected. The speech habit is too often not encouraged to the degree it should be through the day. The residential school leaves itself open to criticism if it produces "deaf and dumb" students. There is a tendency to give up on the "non-oral" student too soon. Even a limited oral vocabulary will be useful in the family setting, work setting and neighborhood setting.

It is sad that the Alexander Graham Bell Association has exerted much of its energy to promoting the pure oral method when it could have had a much greater impact on the education of the deaf if it had used its missionary zeal in promoting speech improvement in all educational settings. All methods endorse speech and everyone is looking for improved methods of teaching speech. There has been no significant change in the methods of teaching speech to the deaf since the days of Caroline Yale. There have been some innovations of her method, but I doubt if any one could say we are producing better speech today than was produced during the days of Caroline Yale and others of her era. We need to concentrate our efforts on finding a better way of teaching speech to the deaf.

"Preparing the deaf to live in a hearing world," is a motto which we hear often. But, this motto means entirely different things to different people. I would feel more comfortable if we would say: "Let us prepare a deaf person who lives in a deaf world to participate as fully as possible in a hearing world." This is a more realistic motto. To prepare and promise a deaf person he can live in a hearing society, and discourage him from participating in a deaf society is unrealistic, misleading and cruel. We must prepare the deaf person to move in a hearing society as much as possible, but give him the privilege, without imposing a feeling of guilt or failure, to move in the comforts of the deaf world.

Can it possibly be considered failure if a deaf student attends Gallaudet College, instead of a college for the hearing? Can it possibly be failure if a deaf person attends a Sunday school class for the deaf, instead of sitting through a service for the hearing from which he gains little, or nothing? Can it be failure if a deaf student attends a school for the deaf, instead of being integrated in a school for the hearing where neither the teacher nor the administrator has orientation to provide the deaf with special techniques and programs necessary for them to learn? Can it be failure if the deaf of a community form a social organization of their own instead of being "exceptional" persons wherever they go? I wonder how many persons who propose that a deaf person only associate with hearing people, ever sat down in a room with hearing people and tried to use lipreading as the only means of receiving conversation? Anyone who is knowledgeable about lipreading knows it is completely inadequate in a group, yet they recommend it for the deaf. The same people who propose to indoctrinate the deaf person in the philosophy that he can, and must, restrict his activities of life to a hearing society do not, themselves, include the deaf in their own social lives, or even employment. There are schools and persons in high places who espouse the belief that society will accept the deaf in everyday situations, and that the deaf should seek out and participate only in a hearing world. Yet, these schools and persons in high places will not employ a deaf teacher, deaf houseparent, or a deaf dishwasher. In other words, we offer the product to the world, but cannot use it ourselves. This is hypo-

crisis at its maximum. Certainly the deaf must be judiciously and wisely placed so that they can carry the complete responsibility of a position with their loss of hearing. Deafness is a handicap only when a deaf person is placed where complete communication with the public is required. This also applies to his social, educational and vocational placement. We amplify deafness by poor placement, and we are escapists from realism when we do not point out clearly the limitations imposed by deafness. Adjustment to deafness is a part of total education, and we often fail to analyze deafness for the deaf. It might seem redundant to say it is necessary to explain deafness to a deaf person. Yet, there is much a deaf person does not understand about deafness. The impact of deafness as far as adjusting to a hearing world cannot be evaluated, if the person has never heard. The well adjusted deaf person is one who understands the limitations placed on him by deafness and a person who is well aware of all the opportunities that are open to him when he realistically accepts deafness.

I think society often accepts deafness more realistically than do those of us who continually try to sweep the problem under the rug, or try to camouflage it with unrealistic philosophies.

The time has come when society should be asked, parents should be asked, and educators should be asked to walk part-way down the path of life and meet the deaf, instead of demanding the deaf to climb the total distance to compete in the hearing world. Expecting the deaf to use tools of communication of the hearing on the same basis as the hearing, is unjust.

Society respects the blind who ambulate with a cane, or a dog. We respect and admire the blind who read and write braille fluently, yet we cannot spare one crutch to help the deaf whose handicap is greater educationally and socially than the blind's.

If I were deaf I would have to ask these questions: Why does society make adjustments and allowances for the blind? Why does it build ramps for the crippled? Why does it have sheltered workshops for the mentally retarded? Why do so many say to the deaf, you shall not have any type of manual communication; You shall not participate in a deaf society. Instead they say, you shall function as a hearing person, even though you are deaf.

It seems that the deaf deserve, parents who accept a deaf child, and make allowances and adjustments, rather than make the child adjust to them; educational programs that prepares them to function as much as is reasonable in a hearing society, but prepares them for citizenship in a deaf world, a society that makes allowances for deafness and accepts the deaf as contributing citizens, as they surely are, and have been for a century.

The deaf have a right to expect educators to design comprehensive educational programs, rather than programs designed to withstand parental and economic pressures. If it is treason to put the interests of deaf children and deaf citizens first in preparing them for life, let us commit treason.

The most neglected area in the education of the deaf is the lack of information disseminated by those who are educating the majority of deaf children. It is a case where the minority has spoken, and is speaking for the majority. The majority seems to always be on the defensive, instead of launching an aggressive offensive. The adult deaf organizations and educators of the majority of deaf children should be placing in the hands of parents of young deaf children, speech and hearing clinics, universities, state health offices, etc., the board view on education and habilitation of the deaf. Our silence has been damaging, and we must recover from our doledrums in the area of public relations. We have a story to tell; we have evidence to reveal and we cannot afford to remain timid. I urge renewed effort on the part of all persons who have a deep, realistic interest in the education of the deaf; I urge renewed efforts in bringing the true story, the whole story, of deafness to parents and the

public; renewed effort in establishing comprehensive educational facilities for the deaf, so that varied educational and vocational programs can be offered to fit the individual needs of deaf children.

All organizations serving the deaf should insist on more basic research on teaching methods and learning problems of the deaf. There are surely better ways to teach the deaf. The traditional methods have been used for centuries are not preparing the deaf for today, and will be less effective for tomorrow's world. Are we afraid to know how ineffective we really are? Can we dare to be diagnosed in fear we might be found wanting?

I have only lightly touched on the diagnosis of the education of the deaf. It behooves all of us to evaluate ourselves and our total educational programs daily. Evaluate and inquire of ourselves if we are sincerely serving deaf children, or false idols?